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Charles E. Watkins

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EXAMINER

GUIDOTTI, LAURA COLE

ART UNIT

PAPER NUMBER

1744

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/627,946

Applicant(s)

WATKINS, CHARLES E.

Examiner

Laura C. Guidotti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-44 is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 26-28, 30, and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Klein, DE 3,630,324 (see also English translation; in prior office action DE 3,630,324 was inadvertently attributed to "Langenfeld").

Klein discloses the claimed invention including a variable power unit (4 or 5; see English translation, paragraph that begins at the end of Column 1 on Page 3) having a power unit body casing (see Figure 1) and a power induction unit (includes power source 4 or 5 and magnets 7 or 17) wherein the power induction unit produces a varying magnetic field when the unit is in an on position in response to supplied power (in that when the motor rotates that it rotates the first magnet 7/17, the rotating magnet inherently has two poles in order for the second magnet 7/17 to rotate, thus the magnet field varies when magnet 7/17 rotates; see English translation Page 3 second column and the section titled "Patent claims" on page 2), and a pad unit (unit to the right of 9 as shown in Figure 2) having at least one piece of ferrous or magnetic material (7 as shown in Figures, referred to as 17 in Page 3 column 2) that moves in response to the varying magnetic field produced by the power induction unit (see Figures; see English translation). Regarding claims 27 and 30, the power unit is held against a first surface by an operator (left side of 9) and the movable pad unit is held against a second surface (right side of 9) by way of magnetic attraction of the movable pad unit to the magnetic

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field produced by the power induction unit (see Figures, English translation). Regarding claim 28, the power induction unit has an electric motor (2) that rotates at least one magnet (7/17) to thereby produce a variable magnetic field in response to power supplied from a source of electrical power, wherein the pad unit rotates in response to rotation of the magnet (in that when the motor rotates that it rotates the first magnet 7/17, the rotating magnet inherently has two poles in order for the second magnet 7/17 to rotate, thus the magnet field varies when magnet 7/17 rotates; see English translation Page 3 second column and the section titled "Patent claims" on page 2). Further regarding claim 30, the pad unit has a rotatable pad section (8, 15) that rotates to scrub the second surface in response to the rotation of the ferrous or magnetic material (English translation Page 3 Column 1 states that the "cleaning can be done by the rotational movement of the round cleaning magnets..." inferring that both magnets rotate, and in order for the magnet to the right of the pane 9 to rotate, it must rotate in response to that of the one on the left of pane 9). Regarding claim 38, the power induction unit receives power from a power cord (not labeled, English translation Page 3 Column 2 first paragraph). Regarding claim 39, the power induction unit receives power from a battery (5).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, DE 3,630,324 (see also English translation) in view of Russell, US 3,646,630.

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Klein discloses all elements above, however does not disclose a power unit having a first plurality of fixation units that provide a corresponding plurality of localized magnetic fields and the pad unit comprising a second plurality of fixation units that are attracted to the localized magnetic fields produced by the first plurality of fixation units.

Russell teaches a glass cleaning device that includes a power unit (47) and a pad unit (45), the power unit having a first plurality of fixation units that provide a corresponding plurality of localized magnetic fields (305, 306) and the pad unit comprising a second plurality of fixation units that are attracted to the localized magnetic fields produced by the first plurality of fixation units (301, 302, 303, 304; Column 4 Lines 10-18) in order to magnetically couple the power unit and pad unit as a whole together (Column 4 Lines 10-18).

It would have been obvious for one of ordinary skill in the art to modify the pad unit and power unit housings of Klein to include a first and second plurality of fixation units having localized magnetic fields, as Russell teaches, in order to provide additional magnetic coupling means for increased magnetic attraction between the pad and power units.

3. Claims 31 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, DE 3,630,324 (see also English translation) in view of Hanson, US 6,634,052.

Klein discloses all elements above including at least one piece of ferrous or other magnetic material that is "sealed" (7/17 is sealed by sheathing 15) and induces agitation of the pad unit to scrub the second side of a tank side wall or bottom (via 8; English

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translation Page 3 Column 2). Klein does not disclose that the magnetic material is sealed in a water impermeable material or that the pad unit is positively buoyant.

Hanson teaches a power unit (12) and a pad unit (10) that has at least one piece of magnetic material (24) that is sealed in a water impermeable material (Column 1 Lines 62-66; Column 2 Lines 55-58) and induces agitation of the pad unit to scrub the second side of the wall (Column 1 Lines 62-66). Also, the pad unit is positively buoyant so that if the magnetic attraction breaks down, the pad unit will be capable of floating to the top of a surface of water (Column 2 Lines 51-61).

It would have been obvious for one of ordinary skill in the art to modify the pad unit of Klein so that it was sealed by a water impermeable material and also so that it is positively buoyant, as Hanson teaches, so that in case the magnetic attraction between the pad and power unit is interrupted, the pad unit will not sink to a bottom of an aquarium but rather float to the top so that a user can easily retrieve it.

4. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, DE 3,630,324 (see also English translation) in view of Zipperer, USPN 3,554,497.

Klein discloses all elements above, however does not disclose at least one or at least two electromagnets included in the power induction unit or a control unit to control the force of magnetic attraction created by the electromagnet in response to a source of electrical power. It is noted that Klein teaches a control unit to control the speed at which the power unit and pad unit rotate (3a).

Zipperer discloses a magnet arrangement that has a power unit having a power unit body casing (21) and a power induction unit (22, 23, 24, 25) and a separate unit

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(33) that moves in response to the magnetic field produced by the power unit (Abstract).

The power induction unit has a controller (26) that rotates at least one magnet to produce a variable electric field (Column 1 Lines 51-60) in response to power supplied from a source of electrical power (Column 3 Lines 7-16), wherein the other unit (33) rotates in response to the rotation of the magnet (Column 1 Lines 61-64). The power induction unit has at least two or a plurality of electromagnets (23; Figure 3) and a control unit (26) having a control surface (button, 27) that a user controls to produce a variable magnetic field having a force of magnetic attraction (Column 1 Lines 51-60; Column 3 Lines 10-16). The other unit (33) moves in response to variations in the polarity or force of magnetic attraction of the power induction unit plurality of electromagnets (Column 1 Lines 51-60). It is noted that the prior art example of Zipperer in Figure 1 has a motorized rotational magnet system (3, 4, 9, 10) very similar in structural operation to that of Klein.

It would have been obvious for one of ordinary skill in the art to substitute the magnets of Klein for electromagnets controlled by an electronic controller, as Zipperer teaches, in order to vary and control the speed at which a following unit having magnetic material rotates electronically with the field being infinitely variable.

5. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, DE 3,630,324 (see also English translation) in view of Howard, US 1,357,869.

Klein discloses all elements mentioned above, however does not disclose that the power induction unit receives power from a transformer.

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Howard teaches a cleaning unit having a power unit having a power induction unit (10) and a pad unit (7), wherein the power induction unit receives power from a power cord (11) and transformer (13) that serves as a booster for the electrical current to power the cleaning unit (Page 1 Lines 72-73).

It would have been obvious for one of ordinary skill in the art to modify the power cord of Klein to further include a transformer, as Howard teaches, in order to serve as a booster for the electrical current powering the device.

6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, DE 3,630,324 (see also English translation) in view of North, US 3,461,476.

Klein discloses all elements mentioned above, however does not disclose that the power induction unit receives power through a ground fault interrupting switch or fuse.

North discloses a window cleaner having a power cord and a motor that further includes a fuse (68) in order to protect the circuitry of the window cleaning device (Column 4 Lines 29-31).

It would have been obvious for one of ordinary skill in the art to modify the power cord system of Klein to further include a fuse, as North teaches, in order to protect its electric components from surges in electricity.

Allowable Subject Matter

7. Claims 42-44 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art made of record includes a handheld magnetic scrubber

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comprising a power unit having a first housing, a plurality of magnets distributed about a surface of said first housing, and a plurality of electromagnets mounted within said first housing, wherein said plurality of electromagnets produce a varying magnetic field in response to changes in power supplied to each of the plurality of electromagnets, a pad unit having a second housing, at least one piece of ferrous or magnetic material distributed about a surface of said second housing, a bore formed in the second housing, a scrubbing material releasable received in the second housing bore, wherein the scrubbing material is rotatable with respect to the second housing, at least one piece of ferrous or other magnetic material operatively coupled to the scrubbing material so that the scrubbing material rotationally moves in response to the varying magnetic field produced by the plurality of electromagnets, wherein the power unit is placed on an aquarium wall and the pad unit is placed on the inside of the aquarium wall opposite the power unit, the plurality of first housing magnets attract the pad unit at least one piece of ferrous or magnetic material to maintain the pad unit adjacent the power unit as said scrubbing material is rotated with respect to the second housing.

Response to Arguments

8. Applicant's arguments with respect to claims 26-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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